ABSTRACT OF THE DISCLOSURE

A method for customizing the response for network based intrusion prevention comprising of: 1) virtual proxying the application data to enable custom response 2) enhancing transport layer (TCP/IP) to enable selective processing and selective modification of the stream for intrusion prevention. The invention also discloses a method for customizing the processing for both network or host based intrusion prevention comprising of: 1) loading externally defined processing procedures for the detection and prevention of intrusions 2) combining multiple of these processing procedures to form a unified processing engine that can be used for intrusion detection and prevention 3) unloading processing procedures that are not needed any more 4) loading new processing procedures that improve the intrusion detection and prevention.